Docket No.: 325772007400
(PATENT)

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE
BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES

In re Patent Application of:
Tomonari YOSHIMURA

Application No.: 09/255,987 Confirmation No.: 9237

Filed: February 23, 1999 Art Unit: 2624

For: IMAGE CORRECTION DEVICE Examiner: Tommy D. Lee

APPELLANT'S OPENING BRIEF

MS Appeal Brief - Patents

Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Dear Sir:

I. REAL PARTY IN INTEREST

The real party in interest for this appeal is Minolta Co., Ltd.

II. RELATED APPEALS AND INTERFERENCES

There are no other appeals or interferences within the meaning of 37 CFR 1.192(c)(2) known to appellant or appellant's undersigned counsel.

III. STATUS OF CLAIMS

Claims 1-10, 12-16 and 18-26 (reproduced in the attached Appendix) are pending in this application.

Claims 1, 10, 16 and 21 are finally rejected under 35 USC 102(e) as being anticipated by Tanio, U.S. Patent 5,726,778 (hereinafter Tanio). Claims 2 and 3 are finally rejected under 35 USC 103(a) as being unpatentable over Tanio. Claims 4-6, 18 and 22 are finally rejected under 35 USC 103(a) as being unpatentable over Tanio in view of Ichikawa, U.S. Patent 5,717,839 (hereinafter Ichikawa). Claims 7, 19 and 23 are finally rejected under 35 USC 103(a) as being unpatentable over Tanio in view to Harrington, U.S. Patent 6,178,007 (hereinafter Harrington). Claim 26 is finally rejected under 35 USC 103(a) as being unpatentable over Tanio in view of Falk, U.S. Patent 5,760,913 (hereinafter Falk). Claims 8, 9, 20, 24 and 25 were objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims. Claims 12-15 were allowed.

IV. STATUS OF AMENDMENTS

An Amendment Under 37 CFR 1.116 was filed January 30, 2004 and an Advisory Action was issued dated March 2, 2004 indicating that the amendments would be entered for the purposes of the Appeal.

V. SUMMARY OF INVENTION

In a conventional image forming apparatus and image reader, when an image is read optically and printed on a sheet of paper, the results vary due to mechanical differences between the image forming device and the image reader (specification, pg. 1, lines 16-19). Thus, it is necessary to perform certain corrections, such as color corrections (pg. 1, lines 19-20). The claimed invention is directed to an image correction device which has a memory for storing correction data relating to combinations of specific image readers and image forming apparatuses, and data correction means for correcting image data output from an image reader using the correction data when executing image formation via a combination of a specific image reader and image forming apparatus and inputting the corrected data to the image forming apparatus (pg. 2, line 24 to pg. 3, line 3).

VI. ISSUES PRESENTED FOR REVIEW

(1) Whether the Examiner erred in rejecting claims 1, 10, 16 and 21 under 35 USC 102(e) as being anticipated by Tanio.

(2) Whether the Examiner erred in rejecting claims 2 and 3 under 35 USC 103(a) as being unpatentable over Tanio.

(3) Whether the Examiner erred in rejecting claims 4-6, 18 and 22 under 35 USC 103(a) as being unpatentable over Tanio in view of Ichikawa.

(4) Whether the Examiner erred in rejecting claims 7, 19 and 23 under 35 USC 103(a) as being unpatentable over Tanio in view to Harrington.

(5) Whether the Examiner erred in rejecting claim 26 under 35 USC 103(a) as being unpatentable over Tanio in view of Falk.

VII. GROUPING OF CLAIMS

Claims 1-10, 16 and 18-26 stand or fall together.

VIII. ARGUMENTS

A. The rejection of claims 1, 10, 16 and 21 as anticipated by Tanio should be reversed.

Claims 1, 10, 16 and 21 have been rejected under 35 USC 102(e) as being anticipated by Tanio.

Claim 1 recites "a memory for storing correction data relating to combinations of the image reader and image forming apparatus; and data correction means for correcting image data output from an image reader using the correction data relating to a specific combination of image reader and image forming apparatus and for outputting the corrected data to an image forming

apparatus. In other words, when an image is inputted at an input device, for example, scanner A, and is then outputted at an output device, for example, printer B, the claimed image correction device finds the correction data specific to the combination of scanner A and printer B among many possible combinations of the scanners and printers connected to the image correction device, and corrects the image data from scanner A for printing by printer B. This is possible because the correction data is generated by directly comparing the image data taken in by scanner A and the digitized output of printer B (pg. 8, line 28 - page 10, line 13). Since scanner A and printer B are directly correlated by the correction data specific to this combination, device characteristics that are unique to scanner A and printer B, including time variant factors, are incorporated into this correction data. Appellant respectfully submits that Tanio fails to teach or suggest storing correction data which relates to a combination of input and output device (image reader and image forming apparatus).

In the Office Action dated September 23, 2003 (paper no. 15), the Examiner asserted that Tanio teaches an image correction device for use in an image forming system which is connectable to a plurality of image readers and a plurality of image forming apparatuses (referring to film scanners 109, 110, color copying apparatuses 103, 104, citing col. 3, line 44 to col. 4, line 12). The Examiner further asserted that Tanio teaches a discriminating device for discriminating an image reader and an image forming apparatus which are connected to an image correction device (citing col. 11, lines 12-24) and a memory means for storing correction data relating to combinations of the image reader and image forming apparatus (referring to color conversion tables of Fig. 14).

In the response filed January 30, 2004, appellant asserted that although Tanio does disclose color conversion tables (see Fig. 14), the information stored in these tables does not relate to a ***combination*** of the image reader and image forming apparatus. Rather, the first two tables store information relating to the input device, and the second two tables store information relating to output device. The information in the first two tables (input device) does not relate in any way to the information in the second two tables (output device). Thus, Tanio never stores any information relating to the ***combination*** of an input device and an output device.

In the Advisory Action mailed March 2, 2004 (paper no. 18), the Examiner asserted that Tanio's color conversion circuit 304 stores input and output conversion tables in LUTs 304-a and 304-b, respectively, according to the input and output devices being used (citing col. 10, lines 12-26, and col. 11, lines 25-31). The Examiner further asserted that the data relating to combinations of an image reader and image forming apparatus is stored in the memory.

Appellant respectfully maintains that Tanio fails to teach that data relating to combinations of an image reader and image forming apparatus is stored. Rather, the color conversion circuit 304 of Tanio can ***only*** store information relating to an individual image reader or image forming apparatus. More specifically, table 304 stores image data read from the scanner (image reader) of the color copying apparatus 103 or 104. Further, as asserted previously, the first two tables in Fig. 14 store information relating to the input device, and the second two tables store information relating to output device. The information in the first two tables does not relate in any way to the information in the second two tables. Thus, Tanio never stores any information relating to the ***combination*** of an input device and an output device. Regardless of whether Tanio combines the information stored with respect to an image reader with information stored with respect to an image forming apparatus at some point in the process, the fact remains that Tanio never stores information which relates to a combination of a specific image reader and a specific image forming apparatus. Therefore, the features of claim 1 are not taught or suggested by Tanio.

Claim 10 is allowable at least due to its dependency from claim 1. Claims 16 and 21 recite the same features discussed above in connection with claim 1, and are therefore allowable for the reasons set forth above. Accordingly, this rejection should be withdrawn.

B. <u>The rejection of claims 2 and 3 as obvious over Tanio should be reversed</u>.

Claims 2 and 3 have been rejected under 35 USC 103(a) as being unpatentable over Tanio.

Claims 2 and 3 are allowable at least due to their dependency from claim 1. Accordingly, this rejection should be withdrawn.

C. The rejection of claims 4-6, 18 and 22 as obvious over Tanio in view of Ichikawa should be reversed.

Claims 4-6, 18 and 22 were rejected under 35 USC 103(a) as being unpatentable over Tanio as applied to either claim 1, claim 16 or claim 21, and further in view of Ichikawa.

Claims 4-6, 18 and 22 are allowable at least due to the fact that the features of claims 1, 16 and 21 are not taught or suggested by Tanio and that Ichikawa also fails to teach or suggest the features of these claims. Accordingly, this rejection should be withdrawn.

D. The rejection of claims 7, 19 and 23 as obvious over Tanio in view of Harrington should be reversed.

Claims 7, 19 and 23 were rejected under 35 USC 103(a) as being unpatentable over Tanio in view of Harrington.

Claims 7, 19 and 23 are allowable at least due to the fact that the features of claims 1, 16 and 21 are not taught or suggested by Tanio and that Harrington also fails to teach or suggest the features of these claims. Accordingly, this rejection should be withdrawn.

E. The rejection of claim 26 as obvious over Tanio in view of Falk should be reversed.

Claim 26 was rejected under 35 USC 103(a) as being unpatentable over Tanio in view of Falk.

Claim 26 is allowable at least due to the fact that the features of claim 1 are not taught or suggested by Tanio and that Falk also fails to teach or suggest the features of claim 1 discussed above. Accordingly, this rejection should be withdrawn.

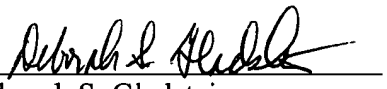
IX. CONCLUSION

For the foregoing reasons, appellant respectfully requests that the rejections of claims 1-7, 10, 16, 18, 19, 21-23 and 26 be reversed. Appellant also requests that the objection to claims 8, 9, 20, 24 and 25 also be reversed.

In the event that the transmittal letter is separated from this document and the Patent and Trademark Office determines that an extension and/or other relief is required, appellant petitions for any required relief including extensions of time and authorizes the Commissioner to charge the cost of such petitions and/or other fees due in connection with the filing of this document to **Deposit Account No. 03-1952** referencing docket no. 325772007400.

Dated: May 19, 2004

Respectfully submitted,

By 

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APPENDIX OF APPEALED CLAIMS

1. An image correction device for use in an image forming system which is connectable to a plurality of image readers and a plurality of image forming apparatuses, the image correction device comprising:

a discriminating device for discriminating an image reader and an image forming apparatus which are connected to the image correction device;

a memory for storing correction data relating to combinations of the image reader and image forming apparatus; and

data correction means for correcting image data output from an image reader using the correction data relating to a specific combination of image reader and image forming apparatus and for outputting the corrected data to an image forming apparatus.

2. The image correction device of claim 1, wherein the plurality of image forming apparatuses are connected to a single image reader.

3. The image correction device of claim 1, wherein the plurality of image readers are connected to a single image forming apparatus.

4. The image correction device of claim 1, wherein the correction data for color printing include various combinations of gradient correction data, resolution data, density correction data and color correction data.

5. The image correction device of claim 1, wherein the correction data for monochrome printing include various combinations of halftone correction data, resolution data and density correction data.

6. The image correction device of claim 1, wherein the data correction means corrects the image data from the image reader based on updated correction data stored in the memory, and outputs the corrected data to the image forming apparatus.

7. The image correction device of claim 1, further comprising means for requesting regeneration of the correction data to update the correction data stored in the memory when a set time interval has elapsed after the last update of the correction data.

8. The image correction device of claim 1, wherein correction data relating to a first combination of image reader and image forming apparatus having the most similar characteristics to a second combination of image reader and image forming apparatus that does not have correction data stored in the memory are used for correcting the image data.

9. The image correction device of claim 1, further comprising means for searching for correction data relating to a first combination of image reader and image forming apparatus having the most similar characteristics to a second combination of image reader and image forming apparatus that does not have correction data stored in the memory.

10. The image correction device of claim 1, wherein the device is a data processing device.

11 (canceled).

12. An image forming system comprising:

a plurality of image readers;

a plurality of image forming apparatuses; and

an image correction device which is connected to the plurality of image readers and the plurality of image forming apparatuses over a network for handling image correction for the whole network of the plurality of image readers and the plurality of image forming apparatuses, said image correction device including:

a discriminating device for discriminating the plurality of image readers from the plurality of image forming apparatuses which are connected to the image correction device,

a memory for storing correction data relating to combinations of the image readers and image forming apparatuses, and

data correction means for correcting image data output from an image reader using the correction data relating to a specific combination of image reader and image forming apparatus and for outputting the corrected data to an image forming apparatus.

13. The image forming system of claim 12, wherein the image correction device is a server.

14. The image forming system of claim 12, wherein the image correction device is a controller.

15. The image forming system of claim 12, wherein the image correction device is an image transmission device.

16. A storage medium for storing program software of an image correction device used in an image forming system connectable to a plurality of image readers and a plurality of image forming apparatuses, wherein the storage medium stores a storage program including correction data relating to specific combinations of the plurality of image readers and the plurality of image forming apparatuses and a data correction control program for correcting image data output from an image reader using the correction data relating to a specific combination of image reader and image forming apparatus and transmitting the corrected data to an image forming apparatus when image formation is executed.

17 (canceled).

18. The storage medium for storing program software of claim 16, wherein the data correction control program further includes a program for correcting the image data from the image reader based on updated correction data.

19. The storage medium for storing program software of claim 16, wherein the storage medium further stores a correction data regeneration request program for requesting the regeneration of the correction data when a set time interval has elapsed after the last update of the correction data.

20. The storage medium for storing program software of claim 16, wherein the storage medium further stores a search control program for searching for correction data relating to a first combination of image reader and image forming apparatus having the most similar characteristics to a second combination of image reader and image forming apparatus which does not have correction data stored on the storage medium.

21. An image correction method for use in an image forming system which is connectable to a plurality of image readers and a plurality of image forming apparatuses, the image correction method is used for suppressing distortion in the image forming system by using optimum image correction information corresponding to mechanical differences and changes over time in the plurality of image readers and the plurality of image forming apparatuses, the image correction method comprising the steps of:

discriminating an image reader and an image forming apparatus which are connected to the image correction device;

storing correction data relating to combinations of the image readers and image forming apparatuses; and

correcting image data output from an image reader using the correction data relating to a specific combination of image reader and image forming apparatus and outputting the corrected data to an image forming apparatus.

22. The image correction method of claim 21, wherein the correcting step corrects the image data from the image reader based on updated correction data and outputs the corrected data to the image forming apparatus.

23. The image correction method of claim 21, further comprising the step of requesting regeneration of the correction data to update the correction data when a set time interval has elapsed after the last update of the correction data.

24. The image correction method of claim 21, wherein the correction data relating to a first combination of image reader and image forming apparatus having the most similar characteristics to a second combination of image reader and image forming apparatus that does not have correction data are used for correcting the image data.

25. The image correction method of claim 21, further comprising the step of searching for correction data relating to a first combination of image reader and image forming apparatus having the most similar characteristics to a second combination of image reader and image forming apparatus that does not have correction data.

26. The image correction device of claim 1, further comprising means for generating correction data by comparing first image data with second image data, wherein the first image data is stored in the memory and outputted to the image forming apparatus and the second image data is created with the image reader by reading the image formed with the image forming apparatus based on the first image data.

#A/F

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TRANSMITTAL FORM

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First Named Inventor	Tomonari YOSHIMURA
Art Unit	2624
Examiner Name	T. Lee
Attorney Docket Number	325772007400

ENCLOSURES (*Check all that apply*)

- [x] Fee Transmittal Form
  - [ ] Fee Attached
- [ ] Amendment/Reply
  - [ ] After Final
  - [ ] Affidavits/declaration(s)
- [ ] Extension of Time Request
- [ ] Express Abandonment Request
- [ ] Information Disclosure Statement
- [ ] Certified Copy of Priority Document(s)
- [ ] Response to Missing Parts/ Incomplete Application
  - [ ] Response to Missing Parts under 37 CFR 1.52 or 1.53
- [ ] Drawing(s)
- [ ] Licensing-related Papers
- [ ] Petition
- [ ] Petition to Convert to a Provisional Application
- [ ] Power of Attorney, Revocation Change of Correspondence Address
- [ ] Terminal Disclaimer
- [ ] Request for Refund
- [ ] CD, Number of CD(s) _____
- [ ] After Allowance Communication to Group
- [ ] Appeal Communication to Board of Appeals and Interferences
- [x] Appeal Communication to Group **(Appeal Notice, Brief, Reply Brief)**
- [ ] Proprietary Information
- [ ] Status Letter
- [ ] Other Enclosure(s) (please identify below):

Remarks

SIGNATURE OF APPLICANT, ATTORNEY, OR AGENT

Firm or Individual name	MORRISON & FOERSTER LLP Deborah S. Gladstein - 43,636
Signature	Deborah S. Gladstein
Date	May 19, 2004

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FEE TRANSMITTAL for FY 2004

Effective 10/01/2003, Patent fees are subject to annual revision.

☐ Applicant claims small entity status. See 37 CFR 1.27

TOTAL AMOUNT OF PAYMENT ($) 330.00

Complete if Known	
Application Number	09/255,987
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Art Unit	2624
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METHOD OF PAYMENT *(check all that apply)*

☐ Check ☐ Credit Card ☐ Money Order ☐ Other ☐ None

☒ Deposit Account:

Deposit Account Number: 03-1952

Deposit Account Name: Morrison & Foerster LLP

The Director is authorized to: *(check all that apply)*

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FEE CALCULATION

1. BASIC FILING FEE

Large Entity Fee Code	Large Entity Fee ($)	Small Entity Fee Code	Small Entity Fee ($)	Fee Description	Fee Paid
1001	770	2001	385	Utility filing fee	
1002	340	2002	170	Design filing fee	
1003	530	2003	265	Plant filing fee	
1004	770	2004	385	Reissue filing fee	
1005	160	2005	80	Provisional filing fee	

SUBTOTAL (1) ($) 0.00

2. EXTRA CLAIM FEES FOR UTILITY AND REISSUE

		Extra Claims		Fee from below		Fee Paid
Total Claims	-** =		x		=	
Independent Claims	-** =		x		=	
Multiple Dependent					=	

Large Entity Fee Code	Large Entity Fee ($)	Small Entity Fee Code	Small Entity Fee ($)	Fee Description
1202	18	2202	9	Claims in excess of 20
1201	86	2201	43	Independent claims in excess of 3
1203	290	2203	145	Multiple dependent claim, if not paid
1204	86	2204	43	** Reissue independent claims over original patent
1205	18	2205	9	** Reissue claims in excess of 20 and over original patent

SUBTOTAL (2) ($) 0.00

***or number previously paid, if greater; For Reissues, see above*

FEE CALCULATION (continued)

3. ADDITIONAL FEES

Large Entity Fee Code	Large Entity Fee ($)	Small Entity Fee Code	Small Entity Fee ($)	Fee Description	Fee Paid
1051	130	2051	65	Surcharge – late filing fee or oath	
1052	50	2052	25	Surcharge – late provisional filing fee or cover sheet.	
1053	130	1053	130	Non-English specification	
1812	2,520	1812	2,520	For filing a request for *ex parte* reexamination	
1804	920*	1804	920*	Requesting publication of SIR prior to Examiner action	
1805	1,840*	1805	1,840*	Requesting publication of SIR after Examiner action	
1251	110	2251	55	Extension for reply within first month	
1252	420	2252	210	Extension for reply within second month	
1253	950	2253	475	Extension for reply within third month	
1254	1,480	2254	740	Extension for reply within fourth month	
1255	2,010	2255	1,005	Extension for reply within fifth month	
1401	330	2401	165	Notice of Appeal	
1402	330	2402	165	Filing a brief in support of an appeal	330.00
1403	290	2403	145	Request for oral hearing	
1451	1,510	1451	1,510	Petition to institute a public use proceeding	
1452	110	2452	55	Petition to revive – unavoidable	
1453	1,330	2453	665	Petition to revive - unintentional	
1501	1,330	2501	665	Utility issue fee (or reissue)	
1502	480	2502	240	Design issue fee	
1503	640	2503	320	Plant issue fee	
1460	130	1460	130	Petitions to the Commissioner	
1807	50	1807	50	Processing fee under 37 CFR 1.17(q)	
1806	180	1806	180	Submission of Information Disclosure Stmt	
8021	40	8021	40	Recording each patent assignment per property (times number of properties)	
1809	770	2809	385	Filing a submission after final rejection (37 CFR 1.129(a))	
1810	770	2810	385	For each additional invention to be examined (37CFR 1.129(b))	
1801	770	2801	385	Request for Continued Examination (RCE)	
1802	900	1802	900	Request for expedited examination of a design application	
Other fee (specify)					

*Reduced by Basic Filing Fee Paid

SUBTOTAL (3) ($) 330.00

SUBMITTED BY

(Complete *(if applicable)*)

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Signature	Deborah S. Gladstein			Date	May 19, 2004

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